BIOGRAPHICAL SKETCH

Give the following information for the key personnel and consultants and collaborators. Begin with the principal investigator/program director.

NAME	POSITION TITLE
R. Woodrow Setzer	Mathematical Statistician

EDUCATION *(Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)*

INSTITUTION AND LOCATION	DEGREE	YEAR CONFERRED	FIELD OF STUDY
University of Chicago, Chicago, Illinois	B.A.	1974	Mathematics
SUNY at Stony Brook, Stony Brook, New York	Ph.D.	1983	Population Biology
University of North Carolina, Chapel Hill	post-doc	1987	Biostatistics

RESEARCH AND/OR PROFESSIONAL EXPERIENCE: Concluding with present position, list in chronological order previous employment, experience, and honors. Key personnel include the principal investigator and any other individuals who participate in the scientific development or execution of the project. Key personnel typically will include all individuals with doctoral or other professional degrees, but in some projects will include individuals at the masters or baccalaureate level provided they contribute in a substantive way to the scientific development or execution of the project. Include present membership on any Federal Government public advisory committee. List, in chronological order, the titles, all authors, and complete references to all publications during the past three years and to representative earlier publications pertinent to this application. DO NOT EXCEED TWO PAGES.

A. Positions and Honors

Positions and Employment:

1975 – 1983 **Teaching/Research Assistant**, Department of Ecology and Evolution, State University of New York, Stony Brook, NY
1984 **Lecturer**, Department of Ecology and Evolution, State University of New York, Stony Brook, NY
1984 – 1987 **Postdoctoral Fellow**, Department of Biostatistics, School of Public Health, University of North Carolina, Chapel Hill, NC
1987 – 1989 **Postdoctoral Fellow**, Developmental Toxicology Division, Health Effects Research Laboratory, U. S. Environmental Protection Agency, Research Triangle Park, NC
1989 – 1993 **Health Scientist**, Health Effects Research Laboratory, U. S. Environmental Protection Agency, Research Triangle Park, NC
1993 – 2002 **Mathematical Statistician**, Biostatistics and Research Support Staff, National Health and Environmental Effects Research Laboratory, U. S. Environmental Protection Agency, Research Triangle Park, NC
2000 – present **Adjunct Associate Professor**, Department of Biostatistics, University of North Carolina at Chapel Hill School of Public Health
2002 – present **Mathematical Statistician**, Pharmacokinetics Branch, Experimental Toxicology Division, National Health and Environmental Effects Research Laboratory, U. S. Environmental Protection Agency, Research Triangle Park, NC

Other Experience and Professional Memberships

1992 – 1993 **Co-Chair**, Organizing Committee for the First HERL Symposium: *Biological Mechanisms and Quantitative Risk Assessment*
1994 – 1998 Member, Editorial Board, *Toxicology Methods*
1998 – present **Chair**, Risk Assessment Forum Technical Panel, Benchmark Dose Technical Guidance Document
2001 – 2002 **President-Elect**, Research Triangle Chapter, Society for Risk Analysis
2002 – 2003 **Chair**, Research Triangle Chapter, Society for Risk Analysis

Honors and Awards:

1978 – 1979 SUNY Graduate School Dissertation Fellowship
1979 Sigma Xi Grant-in-aid of Research.
1984 – 1987 NIEHS Training Grant Post-Doctoral Fellowship
1987 – 1989 National Research Council Associateship
1995 Shared Level I and Level III USEPA Science and Technology Achievement Awards
1997 Honorable Mention, USEPA Science and Technology Achievement Award
2003 USEPA Silver and Bronze Medals for Commendable Service

B. Selected peer-reviewed publications

(Publications selected from 42 peer-reviewed publications)

Elstein, K.H., Mole, M.L., Setzer, R.W., Zucker, R.M., Kavlock, R.J., Rogers, J.M., and Lav, C. (1997). Nucleoside-mediated mitigation of s-flourouracil-induced toxicity in synchronized murine erythroleukemic cells. *Toxicology and Applied Pharmacology*, 146: 29-39.

Vine, M. F., Setzer, R. W., Everson, R. B., and Wyrobek, A. J. (1997). Human sperm morphometry and smoking, caffeine and alcohol consumption. *Reproductive Toxicology* 11: 179-184.

Fuscoe, J.C., Knapp, G.W., Hanley, N.M., Setzer, R.W., Sandlund, J.T., Pui, C-H., and Relling, M.V.(1998). The frequency of illegitimate V(D)J recombinase-mediated mutations in children treated with etoposide-containing anti-leukemic therapy. *Mutation Research*, 419: 107-121.

Tian, D., Feng, Z., Hanley, N.M., Setzer, R.W., Mumford, J.L., DeMarini, D.M. (1998) Multifocal Accumulation of p53 Protein in Esophageal Carcinoma: Evidence for Field Cancerization. Jnt. J. Cancer, 78: 568-575.

Lau, C. and Setzer, R. W. (1999) Biologically Based Risk Assessment Models for Developmental Toxicity. in *Methods in Molecular Biology, Vol. 136: Developmental Biology Protocols, Vol. II.*, R. S. Tuan and C. W. Lo, eds. Humana Press, NJ.

Scheerer, J.B., Xi, L., Knapp, G.W., Setzer, R.W., Bigbee, W.L., and Fuscoe, J.C. Quantification of Illegitimate V(D)J Recombinase-Mediated Mutations in Lymphocytes of Newborns and Adults. *Mutation. Research*. 431: 291-303 (1999).

Hurst, C. H., DeVito, M. J., Setzer, R. W. and Birnbaum, L. S. (2000) Acute Administration of 2,3,7,8 Tetrachlorodibenzo-*p*-dioxin (TCDD) in Pregnant Long Evans Rats: Association of Measured Tissue Concentrations with Developmental Effects. *Toxicological Sciences* 53: 411-420.

Lau, C., Andersen, M. E., Crawford-Brown, D., Kavlock, R. J., Kimmel, C. A., Knudsen, T. B., Muneoka, K., Rogers, J. M., Setzer, R. W., Smith, G., and Tyl, R. (2000). Evaluation of Biologically Based Dose-Response Modeling for Developmental Toxicity: A Workshop Report. *Regulatory Toxicology and Pharmacology*, 31: 190–199.

Lau, C., Mole, M. L. Copeland, M. F., Rogers, J. M. Kavlock, R. J., Shuey, D. L. Cameron, A. M., Ellis, D. H., Logsdon, T. R., Merriman, J., and Setzer, R. W. (2001) Toward a biologically based dose-response model for developmental toxicity of 5-fluorouracil in the rat: Acquisition of experimental data. *Toxicological Sciences*, 59: 37–48.

Setzer, R. W., Lau, C. Mole, M. L., Copeland, F. M., Rogers, J. M., and Kavlock, R. J. (2001). Toward a biologically-based dose-response model for developmental toxicity of 5-fluorouracil in the rat: a mathematical construct. *Toxicological Sciences*, 59: 49–58.

Shaughnessy, D. T., Setzer, R. W., DeMarini, D. M. (2001). Effect of the antimutagens vanillin and cinnamaldehyde on the spontaneous mutation spectra of Salmonella TA104. *Mutation Research*, **480–481**: 55–69.

Wubah, J. A., Setzer, R. W., and Knudsen, T. B. (2001). Exposure-disease continuum for 2-chloro-2'-deoxyadenosine (2CdA), a prototype ocular teratogen. 1. Dose-response analysis. *Teratology*, **64**: 154–169.

Lau, C., Narotsky, M. G., Lui, D., Best, D., Setzer, R. W., Mann, P. G., Wubah, J. A. and Knudsen, T. B. (2002). Exposure-disease continuum for 2-chloro-2'-deoxyadenosine (2-CdA), a prototypet teratogen: Induction of lumbar hernia in the rat and species comparisons for the teratogenic responses. *Teratology* **66**: 6–18.

Knapp, G. W., Setzer, R. W., and Fuscoe, J. C. (2003). Quantitation of aberrant interlocus T-cell receptor rearrangements in mouse thymocytes and the effect of the herbicide 2,4-dichlorophenoxyacetic acid. *Environmental Molecular Mutagenesis*, **42:** 37 – 43.